

- BART opened its doors for transit service on September 11, 1972 and for 38 years has successfully carried over 2 billion passengers to their destinations.
- There are 43 stations serving four counties on 104 miles of track. BART trains are 100% electric with the majority of its power coming from clean, hydroelectric sources.
- The trains run on automatic train control and are supervised by Operations Control Center.
- BART serves SFIA, the ninth busiest airport in the country, bringing 4 million tourists to the region each year.
- The daily ridership is about 360,000.
- The annual ridership is about 100 million people.
- BART's headquarters are located in Oakland, California.

#### **BART'S Mission Statement**

Provide safe, clean, reliable and customerfriendly regional public transit service that increases mobility and accessibility, strengthens community and economic prosperity and helps preserve the Bay Area's environment.



# **BART System Map**



#### **BART EQUAL OPPORTUNITY EMPLOYMENT STATEMENT**

BART is an equal opportunity employer. Applicants shall not be discriminated against because of race, color, sex, sexual orientation, gender identity, age, religion, national origin, disability, ancestry, marital status, veteran status, medical condition (cancer-related) or any protected category prohibited by local, state or federal laws. The BART Human Resources Department will make reasonable efforts in the examination process to accommodate persons with disabilities or for religious reasons.

BART Lynette J. Hart Human Resources Department 300 Lakeside Drive Oakland CA 94612 510-464-6495 employment@bart.gov

www.bart.gov/jobs





# BART Summer Engineering Internship





BART'S Engineering Internship
Program is a training opportunity
for engineering students to gain
professional experience in a
transportation environment as well
as develop skills that will complement
their academic learning.
This is a ten-week program,
June 7-August 13, 2010.

Application Deadline: May 14, 2010









# Benefits of the program include:



- Gaining a realistic perspective on engineering in a transportation setting
- Creating professional working relationships while working with BART staff
- Partnering with mentors to complete complex work assignments
- Understanding the breadth of engineering work supported at BART
- Touring BART facilities
- Receiving a stipend of \$3000.00 and a transportation pass that can be used systemwide for the duration of the internship

## **Department Descriptions**

Maintenance and Engineering (M&E) is responsible for the engineering and maintenance to support the facilities and systems at BART including track, structures, stations, control systems, computer systems, communications, traction and facility power, vertical circulation, fire protection, and ventilation. M&E maintains the Districts Standards, reviews and approves designs, conducts commissioning testing, and executes small to medium capital projects. (4 internships are available)

**Transit System Development (TSD)** is responsible for the execution of large capital projects such as new stations, extensions, and large rehabilitation projects. The tasks are management of consultants performing design, development of funding, and contract management. **(2 internships are available)** 

**Electrical Assignments** – The intern(s) selected for this area will receive training on electrical systems including the installation of Uninterruptible Power Supplies, light-

#### **PROGRAM OVERVIEW**

Interns will partner with experienced engineers in planning, design, construction management, materials testing, quality assurance, inspections and information technology management for projects at various BART facilities. Assignments are project-driven and task-oriented; this is work that directly contributes to the various BART Departments' commitment to excellence in engineering by delivering timely and cost-effective services.

ing replacement projects, and traction power projects. The incumbent will shadow staff engineers as they perform field surveys to analyze power consumption, determine lighting levels, and gather engineering data. Duties will include development of reference drawings and contract related materials.

Note: Electrical Engineering student – 4th year of studies in a 4-year EE-accredited program highly desirable.

Electrical/Electronic Assignments— The intern(s) selected for this area will receive training on electronic control system projects. This includes the train control systems utilized to manage the movement, speed, braking, routing, and station operations of the trains. The assignment also includes interaction with the central computer system and the extensive supervisory command and data acquisition systems at BART. Assignments will include participation in field surveys, design, field installation, and testing.

Note: Electrical or Electronics Engineering student – 4th year of studies in a 4-year EE-accredited program highly desirable.

Civil Assignments – The intern(s) selected for the M&E assignment will receive training from the Civil and Structural Engineering team at BART and will participate in projects to modify aerial structures, install track, perform and analyze structural inspection data, and geotechnical projects. The intern selected for the TSD position will participate in the System Seismic Retrofit project and will participate in field inspections, and will become familiar with design reviews. Both assignments will involve preparation of drawings and specifications

Note: Civil Engineering major required.

Construction Management Assignments – The intern(s) selected for the M&E and TSD assignments will participate in managing a variety of construction and electrical projects and will receive training in office engineering and contract document management,

field inspections, resident engineer duties, and payment procedures. Current projects include cathodic protection, lighting, new track routing, 480 VAC system replacement, and security projects

Note: Construction Management Engineering major required.

# **Desired Engineering Majors**

- Civil
   Electrical
   Electronics
- Construction Management

## **Internship Minimum Qualifications**

- Student must be enrolled in an accredited college or university actively pursuing a Bachelor of Science and/or Masters in engineering in one of the desired majors.
- Intern must be entering at least third year of college and have completed basic engineering courses to assist simple analytical assignments.
- Working knowledge and background of Auto/CAD, and Microsoft Office Suite required depending on assigned functional area.

#### **Selection Process**

- Phase I: Review of essay, college transcripts,
   \*letter of recommendation and application.
- Phase II: Selected students will move forward to an interview.
- Phase III: Successful students will receive a conditional internship offer which includes verification of diplomas and certificates.
- \* A letter of recommendation is desired, but not required. The selection process is scheduled to begin in May 2010 and will continue until all offers are made.

Please advise the Human Resources Department of any special needs in advance of the examination by calling 510-464-6495.

Apply online at www.bart.gov/jobs